Abstract f the Disclosur

The invention provides a method of injection molding a part having an undercut region and a method of assembling a jointed structure from several parts. A two-part mold has a common cavity with part of the cavity in each mold part. A combined pin-in-a-sleeve extends into the cavity in one of the mold parts in order to form a bore in a part to be molded in that cavity. The pin provides a portion shaped to form a first undercut region in the bore. A second pin extends into the cavity in the other of the two mold parts. The two pins are aligned to form a single bore in the molded part while in the cavity. The second pin also has a portion shaped to form a second undercut region in the bore. After an injection molded part is made, the mold opens a limited and discrete distance to allow the molded part to be released from the hold of the mold cavity. Then, the mold opens fully for the continuation of a multi-step operation to pull the pins out of the undercut regions. The invention further provides a support system made up of a plurality of alternating rods and sleeves. Each sleeve forms a pair of sockets configured to movably receive and retain one of the first or second ends of adjacent rods, forming a bendable linkage. A cover is provided to surround the linkage, and a coupler is provided to secure the cover to the linkage. An electrical switch may be provided within one of the joints between sleeves and rods whereby movement of the rod relative to the sleeve actuates the switch. A method of assembling a jointed structure from several parts is also provided. At least two discrete parts having ends that cooperate to form a movable joint between the parts are placed in a groove formed in a plate. The parts are prevented from being displaced out of the groove when pressure is applied to at least one end of the groove to force the cooperating ends of the parts together to form joints

which link the parts. The jointed linkage can then be removed from the plate as an assembled structure.